

CLAIMS

What is claimed is:

1. An apparatus for cleaning a surface within a vessel, the apparatus supported at least partially above a support surface and comprising:
 - an elongate combustion conduit extending from an upstream end to a downstream end associated with an aperture in a wall of the vessel and positioned to direct a shock wave toward said surface;
 - a guide member on the support surface; and
 - a plurality of support assemblies supporting the combustion conduit at a plurality of locations along a length of the combustion conduit and engaging the at least one guide member
2. The apparatus of claim 1 wherein:
 - the at least one guide member comprises at least one track; and
 - each support has at least one wheel engaging the at least one track.
3. The apparatus of claim 2 wherein:
 - the at least one track comprises first and second spaced-apart rails; and
 - each support assembly comprises at least one pair of said at least one wheel being first and second spaced-apart wheels.
4. The apparatus of claim 3 wherein:
 - each support assembly comprises a trolley having first and second of the at least one pair of said at least one wheel.
5. The apparatus of claim 4 wherein:
 - the combustion conduit comprises a plurality of separable segments; and
 - each of the segments is supported atop a single associated one of the plurality of trolleys.
6. The apparatus of claim 1 further comprising:
 - a fuel and oxidizer source coupled to the combustion conduit to deliver a charge to the conduit; and
 - an ignitor positioned to ignite the charge to cause a deflagration-to-detonation

transition for generating the shock wave.

7. The apparatus of claim 1 further comprising:
a resilient member coupling the combustion conduit to the wall.
8. A plurality of apparatus of claim 1 positioned at a given level of the vessel.
9. The plurality of claim 8 wherein:
the combustion conduits are oriented parallel to each other.